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(54) Title: GENETICALLY MODIFIED PLANTS AND THEIR APPLICATIONS IN PHYTOREMEDIATION.

(57) Abstract: Genetically modified plants able to accumulate heavy metals in shoots and methods of removing and possibly recovering said heavy metals, using said genetically modified plants. Said genetically modified plants include more than one copy of at least a sequence encoding a P_{1B}-type ATPase of the Zn²⁺/Co²⁺/Cd²⁺/Pb²⁺ subclass and that they overexpress said P_{1B}-type ATPase.